Spirit gives a metred response to United Utilities

Many different field applications rely upon automated data collection for fast and accurate information. One such application involves capturing data from utility meters. In the UK, one of the largest companies involved in this activity is United Utilities. United Utilities has been replacing its outdated hand held devices with Dolphin® 7900 mobile computers from Hand Held Products, sourced and supported by Spirit Data Capture Limited. The group has also started using Dolphin® 9500s for warehousing applications.

United Utilities plc was created in 1995 by the merger of North West Water and Norweb. It is a member of the FTSE 100 group of leading UK listed companies, and employs over 17,000 people. Its main activities involve managing and operating the regulated electricity distribution, water and waste water networks in north west England.

One of the group’s units is the Energy and Contracting Services division, which forms part of United Utilities Utility Solutions. This is the UK’s leading utility infrastructure outsourcing business. It operates all water and waste water, electricity and gas networks under contract, whether on behalf of United Utilities or external clients. Part of its activities include gas and electricity metering operations, carried out by United Utilities Metering.

This section of the business was previously using hand held devices for collecting technical metering information in the field. However, these had become outdated and expensive, and the type of operating software that could be used was limited. United Utilities needed a solution that would safeguard its existing contracts whilst also meeting the needs of potential customers.

Steve Stainton, United Utilities’ Application Support Manager, explains: “We needed to ensure we could source competitively priced hand held units. These must use the latest technology and have supporting software that gives them the flexibility required to meet our future business needs.”
“There were three key business drivers. Firstly, we wanted to mitigate existing risks. Secondly, we wanted access to the latest hand held technology. Finally, we needed to improve the data quality interface between the meter worker and the end system. We were also looking for devices that would generate lower costs, greater efficiency, and higher productivity.

“We wanted the flexibility of using multiple hand held devices on which both new and existing software could co-exist. The devices needed to be smaller than our previous ones, less expensive and lighter, but still robust. They needed to have 2D imaging scanners, brighter screens and keypad options, as well as a planned support life of seven years to safeguard our investment.”

He adds: “With some 5,000 jobs being raised and 3,000 gas/electricity meters being exchanged per day in real time, we needed reliable and versatile units that we could use in both a regulated and a commercial business environment.”

A project was set up, with a focus group consisting of both the regulated and commercial Operations Managers, IT support, sub-contractor managers, business representatives and meter workers. This ensured that the full end-to-end process was represented and that the investigation was as comprehensive as possible. Two strings of work were started simultaneously – one to invite suppliers to demonstrate their products, and the second to investigate the supporting software.

One of the companies that was invited along (following a recommendation from a supplier) was independent data capture consultancy, Spirit Data Capture Limited. Spirit proposed a solution based around Dolphin® 7900 mobile computers from Hand Held Products. The Dolphin® 7900 is packed with technology and is very compact, ergonomic and rugged, as well as being easy to use. It is therefore ideal for robust mobile applications.

The device has a environmental protection rating of IP64, which is a key requirement for the conditions in which the units will be used. Its battery life exceeded United Utilities’ requirements, and met its desire to avoid the need to charge the unit within the van.

The Dolphin had the largest screen of all of the units being tested. It also uses the latest polymer screens rather than glass. This adds to the overall ruggedness of the unit and helps to minimise any damage. Another key factor that appealed to United Utilities was that the 7900 has a much larger numeric keypad, allowing meter workers with large fingers to easily select the correct button!

The company subsequently ordered a substantial number of Dolphins, which are being rolled out over three years. A further order has been added recently as the division has won a new metering contract. Application Support Analyst, Andy Smith, remarks: “The Dolphin met all of our technical criteria, and the meter workers selected it as their preferred unit in terms of operational usability. As the project was never run as an IT or financial initiative, their views were paramount. In trials, we found that the performance of the Dolphins far exceeded our expectations.”

The metering field operatives use the Dolphins to collect on-site technical information, to log faults and to report information. Jobs are transmitted to the unit, and completed meter technical data are passed back to the metering system in real time via GPRS for immediate completion. Andy Smith adds: “The meter workers involved in the trial were very reluctant to hand the Dolphins back! I think that says it all! We didn’t have any negative feedback at all from them.”

Spirit provided a full support solution during the trial period, and has worked closely throughout with both United Utilities and Wheatley Associates (who wrote the special ‘Today’ software used on the units) to roll them out. Spirit provided a Project Manager, technical support, incident management and trial units from Hand Held Products – all free of charge. It has also been providing pre-configuration and staging services as well as software support.

Steve Stainton says: “Their approach helped to show us the commitment that Spirit and Hand Held Products had given to our project, and how that mentality would be progressed during business as usual. They have been excellent, and couldn’t do enough to help us. Their support was very constructive and helpful throughout the trial period.

“In terms of benefits, the largest cost saving will be realised through the Dolphins themselves. They give us a direct saving per unit when compared with the previous devices, even though they are far more technically advanced. By using such advanced units with their proven technology, we can safeguard our business strategic plans for both existing and future work.”

Andy Smith adds: “The Dolphins are performing very well, and with the enhanced software that is available for the Windows platform, data quality has improved significantly. Looking at the statistics for work that fails auto deprogramming, the volume of failures has fallen from 8% to 1.5%, saving the equivalent of one man day per day.

“One of the big problems with the previous units was battery life, but the Dolphins have no problems in lasting for more than a full shift. The physical condition of the units that have been out in the field since we started using them is good, and shows that they are certainly rugged enough for the job.”

In recent months, Spirit has also provided the Energy and Contracting Services division with Dolphin® 9500 mobile computers. These will be used in the division’s warehouse, to scan metering assets for stock control. Spirit has supplied the asset scanning software for the new devices.

Steve Stainton concludes: “Spirit have continued to provide excellent service and support during the rollout of the Dolphin 7900. They respond promptly to any requests or queries made of them. Spirit and Hand Held Products will continue to be our suppliers of choice when our existing devices come to the end of their life, and also when other metering contracts are won.”